

RESPONSE

Rejections

The Examiner rejected Claims 1-3, 7, 8, 10-14, 18, 19, 21, 25, 26 and 30-38.

Specifically, Claims 1-38 stand rejected under 35 U.S.C. § 112, 2nd paragraph, as being incomplete for omitting essential steps.

Claims 1, 2, 7, 8, 11-13, 18, 19, 26 and 31-38 stand rejected under § 102 as anticipated by Kamperman.

Claims 3, 10, 14, 21, 25 and 30 stand rejected under § 103 as unpatentable over Kamperman and further in view of Maeda.

The remaining dependent claims are indicated as being allowable if rewritten in independent form. From this, it is understood that the § 112 rejection does not apply to these remaining dependent claims since the Examiner apparently believes that they do not omit essential steps. If that is not the case and the § 112, 2nd paragraph rejection is maintained and is intended also to apply to all of these claims, the Examiner should so indicate in the next Action.

§ 112 Rejection Traversed

The Examiner rejected Claims 1-38 under § 112, 2nd paragraph as being incomplete for omitting essential steps. The Examiner refers to MPEP 2172.01. The Examiner indicated that the omitted step is how the data is rendered incorrect.

This rejection is again traversed. In the previous response filed January 28, 2005, this same rejection was responded to and also traversed. The Examiner most recently made no comments on that earlier traversal.

The import of this rejection is unclear to Applicant. The Examiner rejected the claims under § 112, 2nd paragraph as omitting essential steps and referred to MPEP 2172.01. The first paragraph of MPEP 2172.01 refers to a § 112, 1st paragraph rejection for a claim which omits matter disclosed

to be essential to the invention and hence the claim is not enabling. It is understood that no such rejection is being made here since the rejection was instead made under § 112, 2nd paragraph.

Therefore, presumably the 2nd paragraph of MPEP 2172.01 applies, which states that a claim which fails to interrelate essential elements of the invention as defined by Applicant in the specification may be rejected under 35 U.S.C. § 112, 2nd paragraph for failure to point out and distinctly claim the invention. It is understood that such a rejection is being made here. Therefore, presumably the omitted step or steps, in the Examiner's opinion, are needed to interrelate essential elements of the invention. In any case, this rejection is traversed. First, it is pointed out that in fact Claim 1 does indicate the nature of how the data is rendered incorrect. See Claim 1, which recites that "said selected control data being ignored by an audio player." Further, Claim 1 as amended here in its final clause (but not for reasons of patentability - see below) recites "the data reader which is thereby prevented from satisfactorily playing the CD-DA." Hence, it is clear in the claim that the nature of the incorrect control data is such that the disc (CD-DA) is playable on an audio player, but not playable on a data reader.

Moreover, it is clear that how to render control data incorrect is easily understood in light of the specification and knowledge of one skilled in the art, since generally a failure to conform to the relevant CD/DVD standards as regards control data results in incorrect control data.

Hence it is not seen how or why anything essential in terms of interrelating the claim elements is omitted from Claim 1.

Also, note that Claim 1 actually has only in effect a single step or act which is that of "rendering." Hence, there is no actual need for any link between steps or acts, there being only one actual act defined by Claim 1.

Moreover, of course, there is no requirement that the independent claims recite all inventive aspects, including sub-aspects and variations on the invention. That is the role of the dependent claims.

Hence for these additional reasons in addition to those of record in the earlier filed response, it is respectfully submitted that the § 112 rejection is unsupported and it is requested that the Examiner reconsider and withdraw same.

Claim Amendments

The present independent claims are amended to improve clarity and better define the invention, but not responsive to any rejections and not for reasons of patentability. The reference to “CD-DA” (see e.g. Claim 1) merely clarifies what is a “digital audio compact disc.” The claims are also amended to clarify the effect on the data reader. Thus rather than as earlier Claim 1 where the effect was that the incorrect data “negatively effects the playability”, now Claim 1 says “confuses the data reader which is thereby prevented from satisfactorily playing the CD-DA.” Thus playing is effectively prevented by the data reader. The other independent claims are similarly amended here.

Kamperman § 102 Rejection Traversed

As pointed out above, Claims 1, 2, et al stand rejected under § 102(e) as anticipated by Kamperman. In fact, Kamperman has a later filing date than does the priority document of the present application, which is a UK patent application. However, the following arguments instead distinguish the present claims over Kamperman based on their substance rather than filing date. This is not to concede that the present application is entitled to any priority date other than that of the UK priority patent application, which is May 26, 1999.

In his rejection in part 6 of the Action the Examiner stated in pertinent part, see 1st paragraph, page 3:

Kamperman et al discloses that the selected control data being ignored by an audio player, such than an audio player is able to play the audio data [column 5 line 58 to column 6 line 20], whereas the incorrect data negatively effects the playability of the audio data in a data reader which is enabled to read data and process information from each sector of the compact disc [column 5 line 58 to column 6 line 20].

In the following paragraph the Examiner states in pertinent part:

As to claims 2 and 13, Kamperman discloses that the control data encoded on the compact disc that has been rendered incorrect is navigation data [column 5 line 58 to column 6 line 20].

It is respectfully submitted that both of these characterizations of Kamperman are not accurate technically. First, as to Kamperman having selected control data being ignored by an audio player and negatively affecting the playability in a data reader, there is no such disclosure in Kamperman.

As the Examiner clearly understands, in accordance with the present invention there is a method for copy protecting compact discs such that incorrect data is provided on the compact disc, such data being of the type being in sectors which are inaccessible to or not generally read by an audio player. Hence a legitimate audio compact disc purchased by user can be played normally on such an audio player, for example a home music center. However, the incorrect data when read by a data reader renders that CD (which is not necessarily a copied CD but may even be an original CD) unplayable by the data reader (e.g., a CD ROM disc drive). This prevents playing of the data from even a legitimate CD of this type by the data reader. However, note that any changes in accordance with the invention are those made on the compact disc. No special or compliant player is needed. Instead, the invention is operable with a standard player. Further, of course, in accordance with the invention these particular compact discs are unplayable by even a standard data reader.

Hence the present invention is useful with the players and readers such as CD ROM drives presently installed in desktop and laptop computers. The alterations made in accordance with the invention are those made in the form of the data recorded on the CDs. This advantageously has general application with the present installed base of players and CD ROM drives to provide copy protection, since it renders otherwise conventional CDs fully useful on players, but prevents copying since the players cannot make copies, but only readers can make copies. (As a possibly undesirable side effect, by rendering the compact disc unplayable on a data reader, the user is also prevented from using even the CD ROM drive in his computer to play music even though such activity is both legal and usual.)

Hence as pointed out in the specification at page 1, the audio players herein are the commercially available CD music players or other types of disc players. Advantageously the data encoded on the CDs in accordance with this invention does not impinge upon or affect the normal operation of such conventional or standard players.

The Examiner states, as quoted above, that Kamperman meets this inventive aspect. However it is respectfully submitted, that is not the case.

The present inventor recognized the distinction between the playing and reading of data from a compact disc. The players ignore certain control data as not being necessary for playing. However in contrast a reader (as recited in, e.g., Claim 1) reads all disc sectors including all the control data and so is vulnerable, as the present inventor recognized, to selective alterations in that control data, which would confuse or supply incorrect data as far as the data reader is concerned. On the other hand, conventional (standard) players, since they do not even access this data, are not so affected.

Kamperman takes a completely different approach. Kamperman does not indicate or recognize any particular difference between players and readers and does not recognize that there are significant technical distinctions between them.

Instead Kamperman relies on installation of a closed or proprietary CD system, including special CDs and special players. Hence, the repeated mention in Kamperman of "non-compliant read devices," which includes non-compliant players or recorders. See Kamperman column 3 line 17 referring to "existing, non-compliant read devices will try to read the format information from the predefined location, but will read the confusion pattern instead."

Further in the same paragraph at line 25 "Hence a digital copy cannot be made using non-compliant players or recorders While the format information is hidden for existing players, it can be easily retrieved by the player according to the invention." (Emphasis added.)

Hence Kamperman's purported invention requires compliant or specialized players and compliant or specialized recorders. Kamperman states beginning at column 3 line 35:

The invention is based on the recognition, that the format information must be available, but cannot be manipulated in non-compliant devices. By relocating the format information uncontrolled playback of copy protected discs by existing, non-compliant devices; can be prevented.

Hence in Kamperman the relevant distinction is between the prior art (standard) non-compliant read devices which include players and recorders (readers), but Kamperman does not recognize any relevant distinction between players and recorders/readers. Instead, the Kamperman distinction is that his compliant recorder or playback apparatus as shown in his FIG. 9 includes special adaptations in the control unit 20. That is why Kamperman describes and claims has his purportedly inventive playback apparatus. For instance see his Claim 3. See also the description of same at Kamperman column 8, beginning line 47 describing the operation of the control unit 20 in the compliant device.

In other words, if a CD of the Kamperman type was played on a conventional or standard player, playback would not be successful. This is, of course, contrary to the case in accordance with the present application wherein a CD in accordance with the invention is playable on a standard player but cannot be read (played) by a standard reader.

Kamperman Like Stebbings

It is respectfully submitted that the present rejection is similar to the earlier rejection in the Action in this case having a mailing date of December 22, 2004, except here the Examiner substitutes Kamperman for the earlier cited Stebbings reference. The Examiner acknowledged thereby that the Stebbings reference failed to meet the present claims.

However in the relevant respects, Kamperman is similar to Stebbings because both require a compliant player in addition to the altered (compliant) CDs. The Kamperman "confusion pattern," which is the erroneous data in Kamperman, is similar to the intentional data errors introduced in Stebbings. In Stebbings, as in Kamperman, the altered CDs can only be read by a compliant player since the standard player would read this altered data (the confusion pattern in Kamperman and the intentional errors in Stebbings) as being erroneous and so cannot play back such discs.

Further, similar to Stebbings, the Kamperman CDs, even original CDs, are not playable in a standard player. Hence both Kamperman and Stebbings are “closed” systems requiring special CDs, and also special (compliant) players. Neither reference recognizes the relevant distinction between players and readers/recorders.

Hence the above quoted attempt by the Examiner to read Claim 1 on Kamperman, column 5 line 58 and following is not correct technically. Thus Kamperman fails to meet Claim 1 and the rejection of Claim 1 is thereby traversed as is the rejection of the other independent method claim, which is Claim 8. For at least the same reasons Claims 12 and 19, directed to the resulting copy protected digital audio compact disc, also are not met by Kamperman and the § 102 rejection of these other independent claims is similarly traversed for at least the same reasons.

Dependent Claims

All claims dependent upon Claims 1, 8, 12 and 19, which are the only independent claims, therefore distinguish over Kamperman at least for the same reason as do the base claims.

Additionally the Examiner as quoted above rejected Claims 2 and 13 on the grounds that Kamperman does render incorrect “navigation data.” The Examiner pointed to Kamperman column 5 lines 58 to column 6 line 20 in paragraph 6 of his rejection as being pertinent.

This rejection of Claims 2 and 13 is also traversed. There is no use of the term “navigation data” in Kamperman in this passage. It is not believed Kamperman uses that term elsewhere in his disclosure, either. Kamperman does disclose that the data which is affected by his confusion pattern, which is the erroneous data according to the Examiner, is control information. See Kamperman column 5, beginning line 42 “FIG. 3 shows a schematic map of control information of the first part of the recorded area of an information carrier according to existing format.” (Emphasis added.) Further, in that same paragraph at column 5 line 43 “The first section of the map contains format information, called Physical Format Information (PFI), and constitutes the predefined locations 12.”

Kamperman further points out at column 6, beginning line 8, the location of the altered format information “The different location may be somewhere else within a map corresponding to FIG. 3, for example in the CPI area 59 as shown in FIG. 6, or in the reserved area bytes 16-2047 shown in FIG. 4.” Hence, it is understood that in Kamperman the altered data may be in any of areas 12, 58 or 59 in his FIG. 3.

Kamperman further states where this information is typically provided, see column 5 beginning line 13 “FIGS. 3 and 4 show examples of such control information, which is mapped on a predefined location on the record carrier, usually in or directly after the lead-in area.” (Emphasis added.) Hence, apparently the altered information in Kamperman is in or after the lead-in area. This would apparently correspond to area 12 in FIG. 1A.

However Kamperman does not disclose or even suggest that this is “navigation data.” Instead, it is characterized by him as “control data.” The term “control data,” it is respectfully submitted, is broader than “navigation data.” Hence Claim 2 which recites that “the control data encoded on the compact disc which has been rendered is navigation data” is not met by Kamperman. Thus the § 102 rejection of Claim 2 and similar Claim 13 citing Kamperman is not supported by Kamperman, so this rejection is also traversed and it is respectfully requested that this rejection be reconsidered and withdrawn. Thus Claims 2 and 13 distinguish for this additional reason over Kamperman.

Claim 23, also dependent upon Claim 1, as in Claims 2 and 13, recites “navigation and timing data” and hence also additionally distinguishes over Kamperman for similar reasons. The same goes for similar Claim 28.

Co-Pending Applications

The Examiner’s attention is drawn to co-pending and commonly owned and having one common inventor (“Roger EDWARDS”) U.S. Patent Application Heylen et al No. 09/958,445 having an international filing date of February 14, 2001 entitled “The Copy Protection of Digital

Audio Compact Discs,” published as U.S. 2002/0159591 A1, October 31, 2002. The claims in that application have been amended subsequent to the publication.

The Examiner’s attention is also drawn to co-pending and commonly owned and similarly having one common inventor (“Roger EDWARDS”) U.S. Patent Application Heylen et al No. 09/958,461 filed internationally February 14, 2001 entitled “Copy Protection of Digital Audio Compact Discs,” published as U.S. 2002/0159355 A1, October 31, 2002.

Since it is not believed that either co-pending application is prior art to (due to their filing dates) or is directed to the same invention as the present application, these two applications are not cited here in an Information Disclosure Statement.

Conclusion

In view of the above, all pending claims are believed to be an immediate condition for allowance, in addition to those claims earlier indicated by the Examiner as reciting allowable subject matter. Accordingly the Examiner is respectfully requested to withdraw the outstanding rejection of claims and pass this application to issue. The Examiner is requested to telephone the undersigned if it would expedite prosecution, at the number given below.

In the event the USPTO determines an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this paper to Deposit Account No. 03-1952 referencing Docket No. 13692-2002700.

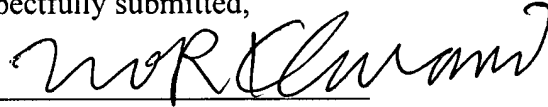
Rule 34

This paper is filed under Rule 34; the correspondence address for this application remains that of Macrovision Corporation.

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Respectfully submitted,

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